

## PRODUCTION OF 1-HEXENE

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**Inventor:** MIMURA HIDEYUKI; AOYAMA TAKAMITSU;  
YAMAMOTO TOSHIHIDE; OGURI MOTOHIRO; KOIE  
YASUYUKI  
**Applicant:** TOSOH CORP  
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### Abstract of JP9268133

**PROBLEM TO BE SOLVED:** To provide a method for producing 1-hexene by trimerizing ethylene in the presence of a catalyst comprising a chromium compound, an alkyl metal compound and an imide compound, capable of highly selectively obtaining the 1-hexene by adding a specific heterogeneous element-containing organic compound in a specified amount to the reaction system.

**SOLUTION:** This method for producing 1-hexene comprises trimerizing ethylene in the presence of a catalyst comprising a chromium compound, an alkyl metal compound and highly safe and easily handleable imide compound. Therein, one or more kinds of heterogeneous element-containing organic compounds selected from the group consisting of an oxygen-containing organic compound, a sulfur-containing organic compound and a phosphorus-containing organic compound is added to the reaction system in an amount of 0.1-100000 equivalents per mole of the chromium compound. The oxygen-containing organic compound includes carboxylic acids, carboxylate esters and ketones. The sulfur-containing organic compound includes thiol compound, sulfonate esters and sulfide compounds. The phosphorus-containing organic compound includes phosphine compounds, phosphine oxide compounds and phosphite compounds.

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